

O-3989

What is claimed is:

- 5           1.       A fire-protection and safety glazing laminate having a haze value less than  
4 percent comprising  
          (A)     a plurality of high modulus layers laminated with  
          (B)     at least one fluoropolymer resin layer  
                  wherein (B) resides between (A),  
10           wherein the high modulus layers comprise glass, polycarbonate or polyurethane,  
                  wherein the fluoropolymer resin layer has a matte finish surface, an embossed  
                  finish surface or a combination thereof,  
                  wherein the fluoropolymer resin layer is exposed to a corona treatment in an  
                  organic gas atmosphere, and  
15           wherein the high modulus layers are adhered to the fluoropolymer resin layer  
                  through a pressure and heat lamination.
2.       The laminate of claim 1 wherein the high modulus layer is glass.
- 20           3.       The laminate of claim 1 wherein the fluoropolymer resin layer comprises  
                  at least one of FEP, PFA, ETFE, ECTFE, PCTFE, PVdF, THV, blends and alloys or  
                  blends or alloys.
4.       The laminate of claim 1 wherein the fluoropolymer resin layer comprises  
25           at least two of FEP, PFA, ETFE, ECTFE, PCTFE, PVdF, THV, blends and alloys or  
                  blends or alloys.
5.       The laminate of claim 3 wherein the fluoropolymer resin layer comprises  
                  THV.
- 30           6.       The laminate of claim 1 wherein both sides of the fluoropolymer resin  
                  layer comprise a combination of a matte finish surface and an embossed finish surface.

7. The laminate of claim 1 wherein the organic gas atmosphere comprises acetone or an alcohol of four carbon atoms or less in nitrogen.

8. The laminate of claim 1 wherein the fluoropolymer resin layer is from 5 to 150 mils thick.

9. The laminate of claim 1 wherein present are two layers of (A) and one layer of (B) and wherein the (B) layer resides between the (A) layer. 10. The laminate of claim 1 wherein present are three layers of (A) and two layers of (B) and wherein each (B) layer resides between two (A) layers. 11. The laminate of claim 1 wherein present are two layers of (A) and two layers of (B) and wherein both (B) layers are adjacent to each other and reside between the (A) layers.